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January 18, 2012

ORIGINAL

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

EX PARTE OR LATE FILED

RE: Lightsquared Subsidiary, LLC
Ex Parte Communication. IB Docket No. 11-109
IBSF File No. SAT-MOD-20101118-00239

Dear Ms. Dortch,

Please accept this letter as further evidence of the potential negative impacts regarding the proposed Lightsquared broadband network.

As Professional Land Surveyors and Professional Civil Engineers we have grave concerns about the FCC granting LightSquared LLC conditional approval (FCC File No. SAT-MOD-20101118-00239) to advance with their initiative to build a nationwide 4G-LTE wireless broadband network. We use high-precision RTK (Real Time Kinematic) GPS instruments on a daily basis. They allow us to quickly and conveniently locate precise terrestrial points for analysis of property monumentation and establishing construction control. GPS allows us to perform our services in a more efficient and cost-effective manner than older technologies. We also use mapping grade GPS to guide us between the various locations where we perform our services along the most efficient route possible.

We have invested a significant amount of time and money into the GPS equipment and training our employees for its use. These efforts were at great risk to our company in a time of a weakening economy, but they have been helping us to survive in a fiercely competitive market. Our ability to obtain precise locations and elevations at an independent point rather than transferring previously established information across long distances has made us a leader in our region. Early testing by GPS technology leaders Garmin and Trimble Navigation demonstrated that LightSquared's technology would likely interfere with GPS (Global Positioning System) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

The Department of Defense, FAA, DHS, NASA, DOI, DOT, DOC, and the Professional Land Surveying and Engineering professions, have all expressed serious reservations in regards to this plan by LightSquared LLC company to build 40,000 ground stations in the U.S. that could cause widespread interference to GPS signals. This network of ground stations will transmit signals within the L-band frequency immediately adjacent to the GPS L1 frequency at more than one billion times the strength of the low-power GPS signal from space. Furthermore, each mobile

phone using LightSquared's wireless service would potentially become a portable GPS jamming device by jamming GPS receivers in its immediate vicinity.

High-precision GPS equipment used by land surveyors, civil engineers, farmers, and other geomatic professionals costing thousands of dollars per receiver would be more adversely affected than the consumer GPS devices given their inherent design. Literally, tens of thousands of high-precision GPS receivers are used in the United States. GPS technology has transformed the way American's have built and managed our infrastructure, adding a tremendous level of efficiency to the design, construction, and maintenance of roads, bridges, commercial properties, residential subdivisions, parks, farms, golf courses, etc.

Here in the Commonwealth of Massachusetts alone, thousands of licensed professional land surveyors and licensed engineers use high-precision GPS equipment in their everyday field work. GPS has become an essential tool for most land surveyors and geomatics professionals today and it is imperative that these GPS signals are not jeopardized by broadband technology. The FCC must make clear, and the NTIA (National Telecommunications and Information Administration) must ensure, that LightSquared's license modification is contingent on the outcome of the mandated study unequivocally demonstrating that there is no interference to GPS. The study must be comprehensive, objective, and based on correct assumptions about existing GPS uses rather than theoretical possibilities. Given the substantial pre-existing investment in GPS systems and infrastructure, and the critical nature of GPS applications, the results of the study must conclusively demonstrate there is no risk of interference. If there is conflicting evidence, doubts must be resolved against the LightSquared terrestrial system.

This situation has the potential of becoming a tremendous public safety issue and an economical disaster not only for Massachusetts, but for the United States as a whole. Senators Pat Roberts and Ben Nelson have recently sent out a joint public letter to senate colleagues urging action on this matter to protect our Global Positioning System. My colleagues and I would be more than willing to meet with you and your staff to discuss this issue in depth at your convenience.

Sincerely,
Holmes and McGrath, Inc

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